

LITTLE BLUE BOOK NO. 74
Edited by E. Haldeman-Julius

The Physiology of Sex Life

Joseph H. Greer, M. D.



LITTLE BLUE BOOK NO. 74
Edited by E. Haldeman-Julius

Physiology of Sex Life

Joseph H. Greer, M. D.

**Professor of Genito-Urinary Diseases, Chicago Col-
lege of Osteopathy. Formerly Professor in
the College of Medicine and Surgery, Chi-
cago, Ill. Author of "A Physician in
the House," "The Wholesome
Woman," "The Social Evil,"
Etc.**

**HALDEMAN-JULIUS COMPANY
GIRARD, KANSAS**

Copyright, 1924,
Fairdeman-Julius Company.

PRINTED IN THE UNITED STATES OF AMERICA

PHYSIOLOGY OF SEX LIFE

CONTENTS

	Page
Physiology of Sex Life.....	5
Consequences of Impurity.....	13
Woman's Sphere and the Invasion of Its Sanctity	20
Influences Causing Abnormal Sexual Desire.	29
Incentive to Prostitution.....	41
The Mystery of Life and the Consequences of Abortion	46

PHYSIOLOGY OF SEX LIFE

Humanity is divided, in relation to physiological laws, into seven stages:

1. Fetal life, from conception to birth;
2. Infancy, from birth to the time of appearance of the first teeth;
3. Childhood, from the first to the second dentition;
4. Boyhood or girlhood, from second dentition to puberty;
5. Adolescence, from puberty to maturity;
6. Manhood or womanhood, from maturity to old age;
7. Senility, lasting until death.

It is very important that we all have a clear understanding in regard to these various stages in order to live aright. The two most important are adolescence and maturity, or the periods characterized by an active sexual life.

Puberty. Sexual instinct, the second law of life, is inherent in every normal individual, and is especially marked during the procreative period. It is the foundation of all desire and association. Puberty is by far the most important period of life as far as development of the mental and moral life of the individual is concerned. The age at which it takes place is controlled by various influences, such as heredity, climate, the general state of health, etc.

Heredity exerts considerable influence. For instance, we will find in some families puberty

PHYSIOLOGY OF SEX LIFE

is reached universally very young, and in other families it is extremely tardy in its approach.

Climate is also quite an important factor. In the torrid zone we will find often times this period is reached as early as the eighth year, and in the frigid zone as late as the twentieth year. In the temperate zone these extremes are seldom met with, the usual time being about the fourteenth year in girls and the sixteenth or seventeenth year in boys.

The general state of health, it may truly be said, exerts the most powerful influence of all. If a child is suffering from any wasting disease, the period is apt to be delayed, and the dangers of over-exertion at this time, either mentally or physically, cannot be too strongly emphasized. Indeed, many years of suffering are traceable to indiscretions and over-exertion at this time.

Up to the age of puberty, the sexual instinct may be said to be neutral. Boys and girls play innocently together, unconscious of the dominating force that is slumbering within. As puberty approaches, the boy assumes a more masterful attitude, his voice becomes heavier and gradually assumes a lower tone, his desires become stronger, his actions more gallant and his thoughts more sensual than formerly. The girl becomes more timid and shy than she has hitherto been; her form rapidly develops into womanly outlines. The changes in both sexes are not only physical but mental and the girl or boy is truly on the threshold of real life, with all its passions, desires, hopes, loves and ambitions. Hereafter, their paths diverge, a

natural barrier rises between them, and each nature gradually assumes the characteristics peculiar to its sex. This is truly the most impressionable time of life, the time when heredity counts for or against the individual, the time when physical and mental changes are the greatest. It is also a very critical period, as it is the time when good or bad tendencies assert themselves. It is an especially critical time for the female sex, as greater changes take place in her and the disturbances are more marked. Insanity not infrequently results from shocks to the nervous system sustained at this time, also numerous other forms of nervous derangement.

Women plays a more important part in the mental, moral and physical well-being of the child than does man. From conception to delivery, the child is partaking of her very being, and she is contributing bone, muscle and sinew toward the maintenance and growth of the child. Disease also has a greater influence upon her sexual organs, and the thirty years of her procreative period are dominated by the functions of the uterine organs.

The changes which take place in the male at puberty, while less clearly marked than in the female, are nevertheless, of vital importance to his entire well-being. Before puberty he has no sexual desires, the generative organs are small and undeveloped and his actions are, in the main, like that of the girl. But at puberty the voice assumes a deeper tone, due to the lengthening of the vocal cords and other changes in the larynx. During the process of change

there is a period during which there is an occasional "break" in the voice, or a mixture of a treble and bass note. This is due to the change having been only partially completed, but as it progresses the voice becomes more smooth and musical in tone until a deep bass is reached in some instances.

The sebaceous glands become more active and "pimples" make their appearance on face and neck; also a coarser hair takes the place of the fine soft hair heretofore found on various parts of the body, especially marked upon the face by the appearance of the beard.

The greatest change, however, manifests itself in the sexual desire, which at this time assumes control of his entire nature, becoming paramount to all else.

These changes come about slowly, and it usually takes about ten years before a man can be said to be sexually mature, generally culminating about the twenty-fifth year.

In the female the change takes place several years earlier than in the male, the changes in the bodily structure are more complex and more rapid. The hips become broader; the generative organs undergo a complete physiological change, the breasts become more prominent and in some cases secrete milk, and the entire form becomes more feminine in outline. But the most important feature of this change is the occurrence of the menses, which indicates that she is capable of bearing children. The reproductive period in woman lasts about thirty years, usually beginning about the fourteenth year and lasting until about the

forty-fourth or forty-fifth year. The natural menstrual period occurs every twenty-eight days and continues about four days, though this varies in different individuals. An exceedingly interesting event taking place at this time, is the process called "ovulation." In the ovary are numerous Graafian follicles in various stages of development, one or more of which ripen every twenty-eight days, passing down the Fallopian tubes into the womb. These little bodies are the human egg or ovum, and if one of these is fertilized by the male spermatozoa it develops into a fetus, otherwise passes off with the menstrual flow. It is not known definitely whether ovulation takes place before or after menstruation, though impregnation is more liable to occur after the period, or it may occur at any time during the reproducing period, and during this time Nature is constantly striving to reproduce. The influence of the sexual organs, therefore, on both sexes, can best be appreciated by comparison, the eunuch with the uncastrated man,—the gelding with the stallion. The removal of either the ovaries of the female or testicles of the male, produces the peculiarities of the opposite sex, making a woman masculine and a man feminine, neither one caring for the society of the opposite sex.

Care of the Child at Puberty.—Too great stress cannot be laid upon the importance of caring for the child at this extremely impressionable time. It is the most important time of life in regard to mental impressions and the moulding of character is concerned. This also, is the time when hereditary tendencies count

for or against the child. Lifelong habits are formed, thus showing the importance of forming them aright at this time, prophylactic treatment being in this, as well as other conditions, by far the simpler method, that is, it is much easier to prevent bad habits from being formed than it is to cure them after having become established. The child at this time is controlled almost entirely by impulse, not having learned self-control in any degree. How important therefore it is, that his environments should be uplifting and that his habits should be carefully directed away from the sensual vices and the influence of evil companions that constantly beset him. Too often schoolmates are the only instructors which many children have, their parents leaving this important duty unperformed and allowing their minds to become inculcated with evil teachings before implanting the good, thus shirking the most important responsibility of parentage. The physical disturbances at this time are so closely allied to the mental, and exert such a profound influence upon the brain, that insanity is a not infrequent outcome of indiscretions at this time.

While the natural tendencies toward sexual excitement are great during this period, it must not be overlooked that it may in no small measure be due to some local irritant, such as a too tight or too loose foreskin or an adherent clitoris. There are various other causes that might contribute toward this condition, such as hemorrhoids, worms in the rectum, etc. The circumcision of boys will often effect a cure in these cases, and a careful examination should

be made in all cases so as to remove the cause if it is a mechanical one; likewise to break up the adhesions of the clitoris will often afford the greatest relief to girls. It is, therefore, of the utmost importance that the child is given a thorough education in self-control and instructed in regard to the irreparable dangers arising from a violation of the important laws of Nature.

The same laws which control reproduction in mankind, also exist in animal and vegetable life. The pride of the male bird in his beautiful plumage and melodious voice, the cock's comb, the horns of the stag and the lion's mane, are all manifestations of his sexual instinct, causing a fondness for appearing well in the eyes of his mate. In vegetable life, fertilization is as necessary for reproduction as it is in man, the two sexes being just as essential to the propagation of plant life. It is, however, disseminated in a different manner. In some varieties the pollen, or male element is carried to the female by the wind for fertilization. These are called "windbearing" plants, and are quite numerous in vegetable life.

The Marriageable Age.—Girls are said to have attained development at the age of eighteen years, and boys at the age of twenty-one; though marriage should not be entertained before the twenty-second and twenty-fifth years, respectively, as complete maturity is not reached before that time, and if a woman enter the married state before complete physical development has been attained, she is unfit for motherhood; neither are her mental powers

sufficiently developed to permit her to assume the responsibilities of motherhood. Not only this, but abortions are liable to occur should impregnation take place before full development. Reproductive powers consist not only in being able to produce children, but in nourishing them after they are delivered, therefore the lacteal glands should be fully developed.

Change of Life.—This change, also called the "menopause" or "climacteric," normally occurs at the end of the thirtieth year of procreative life, which is about the forty-fourth year, varying according to the time at which the first menstruation appeared, state of health, and various other influences. If a girl menstruate at twelve years of age, then the change of life should normally occur at the forty-second year, or if she should not menstruate until the sixteenth year, the menopause would naturally be delayed until the age of forty-six, thus making the child-bearing period thirty years. This change is commonly applied to women alone, but as a matter of fact, men pass through a change also, being less marked physiologically than in the female sex. The menopause is the period which determines the state of health for the balance of life; that is, if this time is safely passed, the individual will enjoy better health than before, or it may be the beginning of suffering for the rest of their lives. But even at the best, they are on the down-hill of life, the sexual organs become smaller, and the tissues all over the body lose their elasticity and recuperative powers. The peculiar features which result in sterility after

the change are the cessation of ovulation in the female and the absence of spermatozoa in the semen of the male.

Thus it is that years rob the individual of physical growth and development and the power of reproduction, yet the mental attributes may be developed to a wonderful degree after this change has taken place, and often a keener interest in intellectual pursuits is enjoyed than ever before.

CONSEQUENCES OF IMPURITY

No one likes to be called, or even thought, selfish, yet it is true that this blemish finds an abiding place in the make-up of the majority of the human race and casts a blight wherever found. It is the commonest of vices and the rarest of virtues, so common in fact that only animals, it has been said, are capable of loving a human being better than themselves.

Self-preservation, we have said, is the first law of life, but it is the outgrowth of self-love, for it is the love of self that makes this law the greatest force in human lives, and when properly exercised it is commendable, inasmuch as it leads to a desire for self-advancement, progress and ambitions which we would not otherwise have. So in the true sense of the word, self-love is not selfishness, but may develop into selfishness if unrestrained, or when we sacrifice the happiness of others for self-aggrandizement, either through carelessness or wilfully. It creeps stealthily in unbidden, and

before we are aware of its presence, habits of selfishness are fastened upon us for life and can only be overcome by a superhuman effort, if at all. They cast a blight upon an otherwise beautiful character and become a curse to all posterity. How can we call a man unselfish who gratifies his passions at the expense of his health, especially when the health of others depends largely upon his own. Who, when he knows full well the effects of his errors upon his own wife and children, will still continue to pursue his pleasures and indulge in promiscuous intercourse until he contracts some filthy disease and transmits it to his family? What a heritage is this he has handed down to his little ones, who, but for him, would never have been brought into the world—all for a few moments of pleasure! And yet, if he were to be told he was selfish, he would be highly indignant.

Venereal diseases are much more disastrous to the health of woman than of man, and are often the beginning of lifelong invalidism and suffering. The generative organs of the female are extremely sensitive, and when inoculated with some filthy virus, a multitude of disastrous conditions may arise. The womb is dependent for its support upon ligaments, and if they become diseased they are either destroyed entirely or stretched so that the womb is deprived of its support and falls out of position, either backward (retroversion), forward (anteversion) or downward (prolapsus), all of which give rise to numerous other distressing conditions.

In view of the prevalence of the venereal diseases, it is astonishing that so many people hold themselves in ignorance regarding them, and this ignorance is often found among otherwise intelligent men; men who hold high rank in business circles and who attend to every detail of business with the greatest care and precision, yet on these matters of vital importance to themselves and their families, they are either woefully ignorant or careless of consequences. Even though they may provide for their families lavishly, they are at heart absolutely and thoroughly selfish, preferring to inflict upon their wives and children lifelong suffering rather than to deprive themselves of a few moments' sexual gratification. The great danger of selfishness lies in its insidiousness, stealing upon one unawares, and when once deeply seated it cannot be overcome without a struggle. The question may be sifted right down to an economic principle—can you afford to pay the price? Ask yourself the same question you would ask if you were going to purchase a new suit of clothes: "Am I getting a good bargain—my money's worth?" Yes, you are getting your money's worth of misery and degradation, without a doubt.

A pure man is a blessing to his family and friends. He is more companionable at home, and his mental attainments make him a better friend and neighbor. They leave their impress indelibly upon his face and reflect the purity of the mind within, even as the contaminating influence of association with coarseness and

vulgarity is depicted upon the face of the ~~fa-~~ pure man.

Love in its purest form is ever combined with the sexual instinct, but intercourse without love borders on prostitution. What man in his right mind would patronize a prostitute who had the smallpox, scarlet fever or any of the infectious diseases? Yet for him it would be much better than the disease with which she is almost universally afflicted. He really has a preference for syphilis, gonorrhea, etc., which cause lifelong misery, rather than small pox, for instance, because of the psychical effect of the word, and because he has a vague idea, at least, of the nature of the disease. Thus his ignorance of the horrible ravages of these diseases causes him to choose the greater of two evils. If all of the venereal diseases could be transformed into smallpox, it would be a blessing to the race.

And then, the expense connected with the treatment of these diseases is by no means a small item. The treatment usually extends over a long period of time, in many instances taking the best years out of a man's life; and the fees for treating venereal disease are usually high, oftentimes terminating in failure; and when you consider the time and money spent, to say nothing of the suffering experienced, it is truly an expensive proposition, and no man in his right mind would entertain such a proposition from a business standpoint. If the form of the disease be syphilis or a chronic case of gonorrhea, it is a skilful physician who can cure it in three years, and by most doctors

these cases are considered incurable, the best they can do being to afford relief. The patient who falls into the hands of a skilled and conscientious physician in the treatment of these diseases is truly fortunate. In the first place, they are hard to cure, and in the second place, they are disagreeable cases to handle, and there is more humbuggery practiced in these diseases than almost any others, and the patient is in a worse condition than he was before the treatment. It is of paramount importance, therefore, that great care should be exercised in the selection of a physician. Choose first and foremost an honest doctor, who will hesitate about promising a cure at a stated time. Such a doctor will effect a cure where others fail. He will use simpler hygienic methods, and will not overcharge you, whereas the "quack" and humbug promises everything and does nothing except to fill the system full of poisons, charges an exorbitant fee, and when there are no more visible effects of the disease, discharges his patient as cured, when in reality the virus has only been driven farther into the system. The successful physician injects no poisons into the system, but rather assists Nature in her great work instead of placing obstacles in her way.

The full import of allowing venereal patients to ruthlessly disseminate disease is not felt or realized. If it were, they would be as strictly quarantined as scarlet fever or small-pox patients, and would be debarred from marriage or sexual intercourse. This would be a propylactic step in the right direction, and

PHYSIOLOGY OF SEX LIFE

eventually go a great way toward stamping out the disease. The propagation of the race should be left to the higher class of men—men pure in body and mind. They are the ones who should be the husbands and fathers, the builders of homes, firesides and nations, and share in the sacred responsibilities of procreation.

From a purely selfish standpoint, impurity exceeds all other vices in its noxious and poisonous effects. Of all the varieties of "wild oats" sown, it is the one most abounding in tares and brambles. We do not show as much intelligence in this respect as the wild animals. When one gets caught in a trap the others will avoid it, but is it so with men? Just the opposite. They are actually warned and told, perhaps, that a certain person has some vile disease; yet he is willing to risk the chances of contracting it. What a pity such men cannot be the only sufferers, but must transmit it to some pure and innocent creature! All records show that the man who indulges in promiscuous sexual intercourse undergoes suffering so great as to overbalance any possible gratification he may experience.

The basis of nearly all unhappy marriages is this very same evil influence. Men become habituated to frequenting houses of prostitution and gratifying their sexual desires in ways apart from the conjugal relation, and finally lose all desire and capability of performing the function with their own wives. Their minds have become so corrupted with sensuality, lewdness and vulgarity that this is the only element

which can satisfy their cravings. This is the time that "love flies out at the window." The sacredness of the marriage vow is broken and its beautiful culmination absent. Then come little fault-findings, quarrels and separation, all the result of an improper use of the sexual functions. On the other hand, where there is a sexual affinity between husband and wife, there you will find the happy home. The husband or wife may be lacking in many attributes which would seem desirable to possess, yet they are all in all to each other and life for them is full and complete. But how few of these happy marriages do we find! How easily love takes its departure and finds other abiding places.

Then, on the other hand, the woman may be to blame, and no doubt this is often the case. She may be fond of society, clubs, etc., and not care to spend time and what seems to her as needless worry in raising children. The men are not always to blame, not by any means. This very condition will drive men away from their homes and cause them to seek the society of other women. These women are sexually cold, not caring for intercourse at any time, or think it is a sin—anything to avoid it. And so they drift apart. The husband is doubtless the greatest sufferer in cases like this, for he is repelled by her coldness and longs for that warmth of love and companionship that perhaps another woman can furnish better than his own wife. It is the physician who sees into the domestic life and is in a position to judge correctly of these things. It is not pleasant to contemplate that woman should be the erring

one, but it is true, nevertheless, in many cases, though as a rule it is woman's nature to be faithful and trusting. The fact that woman is so often the bread-winner, and leads a more independent life than she formerly did, is no doubt responsible in no small degree for this state of affairs.

Most people are naturally good and are only led into error by environment and other demoralizing influences. A few are naturally bad; never hear the soft voice of Love calling to them; they are moral degenerates and should never be allowed to enter the marriage relation. In the light of modern science, there will no doubt soon be laws debarring degenerates from marrying, and not until the proper precautions are taken against it will our civilization be based upon a high moral standard. The force of the sexual instinct controls it today, and not until it is controlled and directed along sanitary lines will civilization be advanced to its highest destiny and mankind be able to get the best out of life, not only for his own good but for that of his fellow-man.

WOMAN'S SPHERE AND THE INVASION OF ITS SANCTITY

Woman plays the role of primary importance in the propagation of the human species. She is the mother, the "matrix" of the entire human race and her tendencies and characteristics are more plainly stamped upon the mental and physical nature of the child than are those of

the father. The only part man plays in the phenomena of life is the fertilization of the human egg. The growth of the egg itself is entirely dependent upon the mother. She carries and nourishes it in her womb for nine months, during which time it is partaking of her very being. The very best and choicest elements of her nature are contributing to the growth and development of the little being within her, even at the expense of her own health, not only before birth, but for many months afterwards. The one great force and incentive in Nature is the propagation of species, both in plant and animal life, and all her efforts are in the direction of growth and procreation. Something very unnatural must take place in order to arrest this growth. The sacredness of her function as a mother should win for her at all times and under all conditions the most profound reverence and respect. Man is by nature chivalrous and deferential to woman. He represents the strength of the human race, and it is his nature to protect the weak. It is only, therefore, when his real nature becomes perverted by ungovernable passions that he transgresses the laws of his nature and becomes cowardly and unmanly.

The leading attributes of a pure and noble woman's nature are gentleness, tenderness, trustfulness and devotion to the object of her love. Every act of her daily life is centered around the beloved object, and the pinnacle of her happiness is reached only when she feels that she is queen of his heart and home. Woman should not be considered the emblem of

weakness. The influence exerted in the home by her reign of love is symbolical of the greatest strength and is the foundation in many instances of a man's very success in life. Her influence in the home life is the soil in which the seeds of his manhood and success are sown. If the soil is fertile, the forces of Nature will have full sway and growth and advancement will result. Is not woman, then, an element of strength instead of weakness?

"As unto the bow the cord is,
So unto man is woman.

Though she bends him, she obeys him;
Where he leads her she will follow.
Useless each without the other."

Thus, man represents the physical strength and woman the moral strength of the world. He is symbolical of strength, courage and aggression, and instinctively seeks to protect womankind. What a gross perversion of his whole nature it is, then, when he degrades her, tramples upon her honor and then casts her off as he would a soiled garment! His manhood is debased, from a moral standpoint, below that of the woman whom he dishonors, for there is not a thing so vile as a man who is subservient to his passions. It is the very invasion of these sexual perverts into the sanctity of womanhood which forms the foundation of nearly all vice and crime. Its evil influences extend from sea to sea, leaving a train of moral and physical degradation in its path.

It is not unmanly to be tender, considerate, charitable and gentle. Quite the reverse, for you will find these attributes present in all

truly great men. This helps to constitute his greatness. He has bravery, strength, pugnacity and a "front of iron" when the occasion demands, or he can be gentle, compassionate, charitable and sympathetic as occasion requires. It is this breadth of character and adaptability to all conditions in life which essentially constitute a great man. Such a man, in whose face shines purity and truth, hold their mother's sex in reverence and honor and do not degrade her.

Moral force exerts a greater influence over mankind than physical force, and its accomplishment constitutes the triumph of civilization. The love of a pure woman is symbolical of strength, therefore, rather than weakness. Her powers of fortitude and endurance often surpass that of the man and when the storm of adversity comes to the family she is the one who comes to the rescue, and her powers of endurance and fortitude rise supreme in the face of misfortune and calamity. She is not only a source of comfort and strength to her husband, but when the occasion requires, she constitutes herself the bread-winner. In fact, there is no limit to what a true woman will do for a man when she loves him, no sacrifice she will not cheerfully endure for his sake. Then it is that her womanly attributes shine out in all their splendor, and she bravely comes to his rescue, cheering and sustaining him until the crisis is passed. Happy indeed should the woman be who can look back upon this sacred duty of love well performed.

Love is essentially a woman's element, and a

clean, pure sexual feeling sacred to her realm is a fundamental law of her nature. Without this, she would not be a womanly woman. Sexual coldness and indifference on the part of the woman is the cause of most unhappy marriages, and many times is the beginning of domestic quarrels and the estrangement of husband and wife, terminating in the divorce court. Every normal woman experiences yearnings toward honorable maternity, which is the culmination of love and the sexual instinct. Everything in nature favors reproduction and if its efforts are not thwarted, contributes to the upbuilding of life in all its forms, and the protection of offspring. The maternal love will sacrifice everything for her child, even though it be a child of shame, and will fight for it as a tigress for her cubs.

Every natural man has a chivalrous feeling for woman and instinctively treats her with deference. What a horrible perversion of his nature it is, then, to see her infamously degraded! Few women would lead a life of shame did not necessity demand that they make a living. In nine cases out of ten she is literally forced to it, and the man who helps her on the downward course is degenerate in character. He has the outward semblance of a man, but the likeness ends there. He may display all the outward acts of gallantry toward the female sex imaginable, yet at heart he is a poltroon. He takes advantage of the fact that she is alone and unprotected in the world to seduce her. Under the guise of interest in her personal welfare, he exerts every possible effort

to bring her within his power. His protestations of love are snares for her feet and the trustfulness of her nature leads her onward until it is too late to turn back, and she finds herself wholly within his power, soon to be thrown aside for another victim. Why should men in this age of civilization and enlightenment pursue these infamous practices? Is it possible there is no incentive to them in love unless it be of the cowardly type? Can they only derive satisfaction by dragging in the mire a woman's most priceless treasure? Plunge yourselves into the river of filth and degradation, you who call yourselves men, but spare the name of woman from defilement and yourselves from censure by giving her the high rank in your thoughts and acts to which she is entitled.

The time will come when these sexual perverts and degenerates will not be able to gain entrance into a clean home. They are unfit for fatherhood and are a menace to our civilization. It is the impure life which makes a man effeminate. They are the ones who squander their sexual forces and sacrifice their manhood at the altar of sensuality. A chaste man is sympathetic and tender of woman and valiant in her protection. No element of effeminacy enters into his nature, but he is strong, self-reliant and chivalrous to women. He never takes advantage of her frailty and weakness, nor seeks as his prey the young and unfortunate girl who chances to drift into a strange city. He would treat her as he would wish his own mother and

sisters to be treated were they placed in the same position.

A venereal patient is nearly always low-spirited, discouraged and shamefaced. He has parted with his manliness and feels himself lacking in that purity and cleanliness of body and mind which he formerly had, and even though the disease is conquered by a skilful physician, the mental impression remains.

If he is an illegitimate father, shirking the responsibilities of fatherhood, he feels himself a coward, and it becomes stamped upon his attitude and bearing. But think of the irreparable wrong done to the poor victim! Society will forever point the finger of scorn at her and she can never live it down, but it is ever ready to receive with open arms the cowardly degrader of her honor. It demands chastity in women, but impurity is a necessity for men. It is woman's nature to love and be loved and she is often too ready to yield to its influence. "Love is the history of woman's life; it is an episode in man's."

Then there are the houses of prostitution where innocent girls are bought and sold, lured with the promises of a life of ease and luxury. For such work as this, it is demanded that they must be young, attractive and docile. They enter the doors of these places, many of them never to return. They are forced into this life of shame until they would not leave it if they could.

Human history can only record the struggles which are constantly taking place in nearly all the walks of life. It cannot even faintly pic-

ture the wreck and ruin which social impurity has caused from the beginning, and will continue to cause. It cannot restore misspent years in a man's life, nor bind up the breaking heart of woman.

Rightly guided and controlled, the sexual instinct leads to the fullest enjoyment of life. It leads men to found homes and place in them the women whom they love and honor. It brings children to gladden those homes, and purity and virtue are their priceless heritage. Alas, how few ever experience love in its perfection! It is a word too often used as a convenient and alluring word to obtain the gratification of a moment. Few women can overcome a shock to real love. Even though they are strong enough to conceal it from the casual observer, yet its influence still remains. Woman loves a man more for association with him, and for the attributes of mind and heart. She loves to be near him, to exchange confidences with him and to feel and know that he sympathizes with her. This association is an assurance and strength to her and means far more to her than the sexual embrace. A sensual love cannot remain constant. It seeks gratification from any source which affords the greatest degree of satisfaction.

Woman is unaggressive, though love is her very life. Her modesty forbids her to make any advances to the object of her devotion, even though it may be a necessity to her. She will suffer in silence rather than sacrifice her womanly grace or good breeding. Her con-

fiding nature places absolute trust in a man when he has once gained her love.

Woman's true sphere is in the home under the support and protection of her husband and in the full enjoyment of his confidence and love and the joys of maternity. When thrown out into the world upon her own resources she is always at a disadvantage. However capable she may be and however well she may perform her work, she never obtains as high remuneration for performing the same class of work as a man does, even though she may do it better than he. She is in more need of consideration than her more fortunate sister, yet, there are snares constantly being laid for her feet.

The general condition of woman, however, is improving with her higher education. The reason women have occupied the subservient position, which they have for ages, is because they do not use the intelligence with which they are endowed. Could we expect our bodies or our muscles to develop if we never used them? With a few exceptions, the brain of woman is rusting out. She allows men to think and act for her until she is unable to do so for herself. All that is necessary for her to do is to use the gray matter which Nature has given her and she will then be ready to take her place in the world wherever she may be called,—whether it is in the home or out in the world. She will make a better living for herself and command greater respect if she is destined to face the world alone, and she will make a better wife and mother. The counsel of women even today has no small influence on the affairs

of state and of the nation. The quicker perception and keen intuition are often the guiding influence which controls legislation. It will take a strong effort on her part to shake off the bondage in which she has lain so long, but she is making rapid strides in this direction and with the advent of woman's suffrage she will be placed on a footing where she can demonstrate her capabilities. This condition will not only afford opportunities for her own mental development, but the nation at large will profit by it. Women will not be dragged down or degraded; but will exert a powerful influence for good not only in social but in political circles. Our laws will be more just and humane and a higher state of civilization will rapidly develop.

INFLUENCES CAUSING ABNORMAL SEXUAL DESIRE

Anything which enfeebles the powers of resistance will increase the desire for sexual gratification. Alcohol has a marked influence in this direction and almost invariably leads to licentiousness when indulged in to excess. It confuses the brain and arouses the animal passions within us. Its use medicinally is greatly over-estimated and usually brings about the very condition in the system which it is intended to correct, its reactive influence being to weaken resistance instead of strengthen.

Immodesty in dress is another important factor which lures men to the more sensuous side of life. Women array themselves for a

public ball in gowns displaying their forms indecently. They are lewd, coarse and vulgar. No woman of refinement seeks to display more of her figure than the ordinary dictates of dress require. It incites man to sensuality and lasciviousness, and it is accentuated by bewitching perfumes and seductive music. It is not the purpose of the author to denounce dancing or its devotees, but rather to point out the ways in which men are often allured by its fascinations and the influence it often exerts upon the mental and physical well-being of men and women. Indeed it would be a hazardous thing to undertake were the author inclined, so popular and universal a pastime has it become. Its patrons, however, do not represent the intellectual side of life. Men of letters, scholars, physicians and students find enjoyment and rest reading a good book. The thinking men of the country find pleasure and recreation in living nearer to Nature and in out-of-door sports. Here they find rest for the tired mind from the strenuous affairs of daily life.

Many enjoy the rhythmic step of the dance with its harmony of sound and motion, greatly enhanced when two people of the opposite sex dance together. In certain conditions in life perhaps a few moments of frivolity would not be a bad thing, but unfortunately humanity is not able to resist its seductive influence. If women would go to the ball-room decently attired and not arrayed in the garb of Mother Eve, its evil effects would be largely overcome. As it is, it is often the beginning of immorality

and sensuality. The scanty attire of these women is an invitation to men sexually and they are only too ready to avail themselves of it.

The modern stage is another of the seductive influences placed temptingly before the eyes of men. The educational influences of good, ennobling plays satisfy the lovers of the drama and do not over-stimulate the passions, but the modern stage abounds in the waving petticoats and the glorification of vice and lasciviousness. Modesty and morality find no place in their repertoire. That would be too tame for the chronic theater-goer. The stage has therefore become the hotbed of impurity, and the actress who maintains a clean reputation is the exception.

The vulgar in art also has an immoral influence upon all who behold it. Nothing more ennobling can exist than the pure representation of a physically perfect type of man or woman where the purity of their hearts and minds are shown forth. True art and Nature cannot be at variance, for it merely transfers to canvas the glories and truths of Nature. This is ennobling and inspiring, but the true artist does not seek to amuse. He has no taste for the suggestive in art and the sight of it is more abhorrent to him than anyone. Civilization is not advanced, but greatly retarded by the display of statuary in suggestive attitudes which can only have a demoralizing effect.

The effect of impure literature upon the minds of the young also exerts a blighting influence. The daily press teems with sensa-

tionalism, horrible accidents, stories of "baby farming," etc. All of these things tend to corrupt the mind and lead it into channels profoundly low and degrading and sows the seed which fills the penitentiaries, brothels and the prisons to overflowing. It is extremely distasteful, not to say disgusting, to pick up a paper at the close of a day of strenuous toil, and attempt to find items of interest,—current events that are of interest to the intellectual mind,—and find little aside from crimes and casualties.

Abnormal sexual desire is also caused by mechanical irritation in many cases, and often leads to masturbation. Upon careful examination will be found a too loose or too tight foreskin, causing a constantly irritated condition which accentuates this desire. The modern physician will make an early investigation of these cases and in nine cases out of ten will find the condition mentioned which will be instantly relieved by circumcision. In girls, an adherent clitoris will cause the same condition and they are often censured for forming evil habits which are the result of mechanical irritation.

Thus we have alcohol, the ball-room, the modern stage, the vulgar in art and literature, all tending toward an over-stimulation of the cerebral centers which control the generative functions. A child of ten or eleven years can barter her honor and the seducer is innocent in the eyes of the law. Theaters would not be patronized were they kept within the bounds of decency; the ball-room would lose its charm

if it were not for the indecent exposure of arms and breasts. Few would read the papers did they not learn the latest gossip the most revolting murder and the most horrible railroad accidents, all of which weaken our powers of resistance and foster sensuality.

INCENTIVE TO PROSTITUTION

It is pleasant to think that men and women are not naturally vicious and immoral in a general sense, and this thought is borne out by actual investigation. Environment and necessity are the causes of nearly all prostitution today. What woman would choose to sell her body and become an outcast from society? To have her name dragged in the mud and mire of public opinion and become a loathsome object of contempt even to her seducer. Very few enter this life from choice. Women love to be admired. Some love to be thought beautiful in face and form or are especially fond of being considered well dressed. Others like to be admired for intellectual attainments, culture and refinement. All seek admiration in one form or another and love to excel in some particular line. It is only when her nature becomes perverted, when some strong influence is brought to bear upon it, causing her to sacrifice her own feelings, that she consents to a life of degradation. There must be some incentive above the ordinary, and this is found in the lavish remuneration which an attractive young girl receives. But as she loses the freshness of youth she cannot command the price

she formerly did. She soon becomes faded and worn and is rejected for one more attractive. The first glamour of the life with its high remuneration, seems a god-send to her. She had no money, no employment, except, perhaps, a poorly paid position in the stifling air of some factory with long hours, at which she could barely eke out an existence. She must make a change or starve. The first step in her downward course is not taken after careful thought and premeditation, but she is approached by the man with pretenses of love, and by his lying devices is lured little by little into this life of shame. Hers is a steady downward course. In any other calling or profession in life, there is a gradual rise, and the early years of a business career are poorly paid, increasing as greater proficiency is reached. Not so with the life of the prostitute. She grows less and less desirable, and usually receives the highest price paid for the sale of her body at the very outset of her career.

And what are the consequences to the man who has influenced her to this life? He suffers only in his purse or from some disease. If he has been lionized in society, he is still treated with the same respect. He occupies the same pew at church and travels the same road he has always traveled along with the rest of God's anointed. He goes right on betraying and ruining innocent girls, spreading disease and contaminating all who come in his path. Not a shadow of blame ever rests upon him, even though his habits may be known. He is wealthy and influential. The clubs and

societies could not be supported without him; the minister would be but poorly paid if he were to be ostracised. However degraded a girl may become, she practically never enters a life of prostitution if she belongs to the wealthier class. Think, then, what these poor, degraded creatures must suffer! Think what they sacrifice in entering upon this life! They are entitled, at least, to the profoundest sympathy and the broadest charity, if not to a crown of honor for their martyrdom and self-sacrifice. For have they not sacrificed the greatest treasure known to pure womanhood?

Some men argue in favor of prostitution; that it is a necessity and should be recognized as such. Would those men place their own daughters there? If not, why place someone else's daughters who are, perhaps, just as good, just as pure. Why uphold and sanction the degradation of womanhood as long as it does not enter your own household?

It is easy for one in comfortable circumstances to criticise the fallen woman and wonder how she can yield to temptation, but put yourself in her place for one day only, and then ask yourself the question why these things are done. We can never tell how strong we will be until we are placed in the same position ourselves; then and then only are we competent to judge. It is safe to say, then, that practically no normal woman would seek this life. We come in contact with various abnormalities which are no doubt largely responsible in leading a woman to adopt it from choice. These conditions, though anatomical,

still have an intimate relation with the mental processes, and careful investigation has demonstrated that anomalies are more frequent among prostitutes than any other class of women.

There is a pathological condition known as Satyriasis in man and Nymphomania in woman in which there is an irresistible impulse to seek sexual gratification. These cases usually end in the insane asylum. A woman with Nymphomania seeks any means to gratify her desires and exercises no moral restraint whatever. She is completely the victim of her intolerable cravings and experiences it in a greater degree than a man suffers with Satyriasis. The disease is said to be caused by a lesion in the brain, therefore removal of the ovaries or clitoris would be of no avail. Many times a person may be suffering from this disease in a modified form, but not pronounced enough to be distinctly classed under this disease. This doubtless, is the cause of what to an ordinary observer may seem to be an abnormal sexual desire, therefore great charity should be exercised in regard to these cases, as the patient may not be wholly responsible for acts committed. Naturally, women do not possess the sensual passion in as great a degree as men, but still they are essentially more sexual. Their enjoyment depends as much upon the love touch and caresses, perhaps more, than on the act itself. It is safe to conclude, then, that women do not enter a life of prostitution from any lustful desire, but because necessity seems to them to demand it. Of

course, there are exceptions to these cases, some women having an insatiable desire for finery and personal adornment, which perhaps never has been gratified. They have seen others wearing the things they coveted for themselves and could not buy from their scanty wages. They do not see the degradation, social annihilation and the many other evils that follow in its train. They only see the life of luxury and ways in which their vanity will be satisfied.

Many girls have within them that daredevil spirit which leads them to do many things on the impulse of the moment, that they regret afterwards. This spirit unrestrained carries them to the brink of this awful pit and they plunge in. Once the first step is taken there are plenty to help her on her way downward. At first she was doubtless tempted by false protestations of affection on the part of some man. For if a woman thoroughly believes a man loves her, the rest is easy. She puts her trust entirely in him and believes in him; believes she has his real love, for she has not yet learned the meaning which her seducer places upon the word love. She feels it welling up in her own heart and believes it is returned. Imagine a cruelty more wanton and more heartless. Picture, if you can, a state of society more depraved and corrupt than ours is at the present day, which receives, with open arms, her seducer and tramples under foot the girl, who a moment before was as pure as the sunshine. The law cannot touch him if he has plenty of money. It is only the

poor man who occasionally becomes convicted. Then what is the remedy for this wholesale seduction? There is none as long as society and the family circle continue to receive in their midst the offenders. Reformation can only come when virtue and honor assert their supremacy over dishonor and profligacy, and the seducer is forced to occupy the place of the seduced and hide himself from the eyes of the world for very shame. Let him be the object of contempt in place of the girl he has wronged and his self-love would be so deeply injured that he would consider well before making another venture. There is just enough selfishness in mankind to hesitate before taking a step which they feel will react upon themselves. Reform is scarcely possible with existing social conditions. When they are changed and the tide of public sentiment and legislation is brought to bear upon them, reformation will come with a bound.

A few are actually born into the profession and are forced to the life by their mothers, who reap a handsome profit by disposing of their favors. This is not usual, however, as the love of even a fallen woman for her child impels her to shield it from the life she herself has led.

Among the very poor in large cities, several families are often huddled together in one apartment, eating, living and sleeping all in one common room. The children of these parents are taught no barriers between the sexes; they become depraved and licentious like their parents. They are criminals and vagabonds

by nature and it is therefore natural for them to grow up into prostitutes. This phase of the question is also the result of social conditions, but the most inhuman and degrading of all, is the wanton traffic in girls. Organized agencies are in existence whose business it is to keep the bawdy houses supplied with attractive girls and women. They resort to any means to lure them into their power. They even have representatives who are constantly on the watch in our crowded thoroughfares and in the lower strata of society, for victims with which to indulge in this nefarious traffic. As the life of a prostitute is scarcely more than five years, it requires constant diligence to keep the market supplied. The procurer or procuress are always on the watch for girls who are left alone in the world, or who are away from home in a large city unprotected. They are enticed by advertisements in the columns of our daily papers. These elegant looking men and women are often at incoming trains, intelligence offices, lodging houses, and even gain entrance into churches and hospitals, plying their trade in any way which may seem at the moment opportune. Their victims must have youth and beauty as this insures popularity with their customers. Everything must have an air of luxury and even the very clothes the girls wear belong to the "madame." As long as they are docile and obedient and remain attractive, they are retained, but if for any reason, they fail to be a source of revenue they are kicked out without mercy. The white slave traffic is a curse and disgrace to our

civilized land; a black stain upon her honor. We send missionaries to foreign countries to preach the gospel to the heathen. They sacrifice all that is dear to them and imperil their very lives for what they hope to do for the heathen, while right at their very door these things are going on. The poor ignorant heathen are at least not harming anybody else, and if the crying need of our slaves were appreciated and understood it could in a measure be abated. Everything in Nature cries out against this base practice that draws scores and scores of young women into its vortex to satiate the lust of men. The enormous sum of money expended in the support of these brothel houses would, no doubt, place the poor in our large cities in comfortable circumstances, but the money expended is nothing compared to the moral degradation and stain upon the fair name and honor of our people.

All efforts at reform have been in the direction of rescuing fallen women. They do not think of the woman that is to be put in her place. For every woman taken out of a house of prostitution a fresh subject must be supplied. A successful physician treats the cause of the disease and not the symptoms. The cause of this evil rests with men who create a demand for it by patronizing it. It would seem that the almost absolute certainty of a man contracting disease who patronizes these places, would be sufficient to restrain him. If in addition he were to sacrifice his character as a gentleman in the eyes of the public, he would not long continue in these practices. A man

with any chivalry in his nature will resent any offense offered to an unprotected woman especially if she be young and alone in the world, and will do his part in protecting her from harm, as he would have others do for his own daughter or sister.

LEGALIZED PROSTITUTION

Various attempts have been made to legalize prostitution in the United States and other countries, and while the system is in force in some parts of Europe, it has been found to defeat the plan which it was intended to regulate. Its object was to protect pure women from insult and control the spread of venereal diseases. On the other hand, reports show an increase in the traffic as well as an increase in the spread of disease, thus proving the system a failure and a strong incentive toward increasing the vice. Why not legalize any other crime, such as theft, murder or rape? The advocates of this system claim there are a large number of men who must have their sexual appetites satisfied, and a certain number of women and girls must be sacrificed to satiate their lust and insure them from contracting disease. It is plain to see that the interests of woman are entirely ignored and instead she is offered up as a sacrifice at the feet of vicious men. It has been found that virtuous women and unprotected working girls cannot walk the streets without being accosted in localities where this system is in force. The purpose of

he plan is to have harlots undergo a medical examination at stated intervals, and if found infected they are put into the lazaretto and fresh, healthy women are selected to take their places! How utterly absurd it is that this scheme could in any way protect pure womanhood! It is a sain on the honor of any nation that holds unchastity a necessity for men, and offers up her women at the shrine of his lusts.

In some countries there are localities which are subject to military rule and both soldiers and prostitutes must submit to a medical examination, and, if found diseased, are sent to a hospital until danger of contamination is passed. Of course, this controls the spread of disease somewhat in these particular localities, but at the expense of the outlying districts to which these women flee in order to avoid inspection, thus spreading the disease in localities unprotected by the same system. In order to make the inspection system thorough, both sexes should be examined alike. Even at best, there is great danger of error in diagnosing these cases, as it requires a medical expert in venereal diseases to detect gonorrhea and syphilis, except when they are in the active stage. It is often necessary to make several bacteriological tests to detect the specific germ which causes the disease; therefore the ability to successfully diagnose these cases is not within the scope of the ordinary physician. Then again, at the time of examination a prostitute might be in the incubation stage, during which time none of the symptoms appear, although infection will almost certainly be transmitted.

If medical examination did anything to lessen the spread of the venereal diseases or decrease prostitution in any way, we would sanction it most heartily. But reports do not show that such is the case. Or if by any means whatever this evil might be abolished and thus rid our nation of the awful consequences of its ravages, what a benefaction it would be, not only to the present generation but to posterity! The only feasible method seems to be that venereal diseases be treated the same as contagious fever cases, imprisoning or quarantining all, male and female alike, who are affected with it. This, of course, would necessitate an increased police force, but would doubtless, in a measure at least, relieve the condition now existing. Both sexes are concerned in the prevalence of this vice, but the men are in the majority of about five to one. It is they that furnish the money to make this traffic possible, who spread the contagion from one house of ill-fame to another, and finally infect their own wives, making her life a burden to herself and a menace to her offspring.

There could be no greater protection to criminals of every class than the legalizing of the houses of prostitution, for they are harbors of refuge to all classes seeking the escape of the law. It has been proven where the system has been in force that it is an absolute failure. It demoralizes society, spreads diseases, increases prostitution and protects criminals and causes the very condition it seeks to remedy. It has been pronounced inefficient by police officials and scientific men, after a prolonged trial in

various places. Nor do we think that an abrupt abolition of all of the houses of prostitution would be advisable. What is necessary first is the enlightenment of the people regarding the physiological law to which nature and hygiene conform; *and that no self-respecting man or woman will seek to better their own condition by the downfall of a brother or sister.* In a shipwreck, were a man to trample under foot women and children to save himself, how the papers would teem with his cowardice! Yet they are in a sense pardonable, because they are under the influence of a panic, and scarcely responsible for their acts. But the prostitution of women is deliberately and coolly planned—even legalized in some countries! A certain number of young women are set aside for the purpose of gratifying the lust of coarse and brutal men. Alcohol inflames the mind and renders the man under its influence a dangerous associate; therefore, alcoholic drinks should not be sold in houses of ill-fame; married men and minors should not be allowed there; the "age of consent" should be raised, and soliciting on the streets prohibited. All of these things would tend to lessen the evil and diminish crime. In short, if men would be humane, chivalrous and manly, reverence their women and not degrade them, the world would be infinitely better and they would be better for the effort.

Nor do we think that men are entirely to blame for this condition of affairs. Far from it. Woman holds the key to the situation in her own hands, in a majority of cases. She

is just as able to influence this situation for good as she is other important matters over which she has control. If every wife and mother would consider the management of her domestic affairs of primary importance; if she would seek to make the home the most attractive place in the world to her husband; if she would preside over it with all the womanly grace of which she is capable, it is safe to say she would wield an influence hitherto unfelt, and the majority of the houses of ill-fame would be compelled to close their doors for want of patronage. If the home is pervaded with a spirit of love, harmony and peace, and the husband and father feels that he is entering a place of rest from the cares and worries of business life, that is the place he will come. Here he finds in the conjugal relation all that he requires for his mental and physical well-being. Then why should he go elsewhere? The average man will not. We are all created with natural appetites in their various phases, and these appetites must be satisfied in order to maintain a normal state of health. The sexual appetite takes no insignificant place among them; in short, it is the foundation of the home life, and the woman who looks upon these things from a physiological standpoint is the woman who retains her husband's love and succeeds in making home the most attractive place in the world to him. Men are not bad from choice any more than are women. The refining influence of a well ordered household arouses all the chivalry there is in his nature, and he has a greater respect for womankind now.

cause his own wife fulfills his expectations. These duties do not ordinarily consume her entire time, and because of the spirit of harmony and rest in her home life she is better equipped to master subjects of interest to the world at large than she otherwise would be, for "The hand that rocks the cradle rules the world."

THE MYSTERY OF LIFE AND THE CONSEQUENCES OF ABORTION

While illegitimate sexual indulgence doubtless leads to abortion in no small degree, yet it is safe to say that it is practiced within the home circle to a greater extent than anywhere else. It is needless to say that any interference with the course of Nature is essentially harmful, especially to the mother. As far as health is concerned, man plays an insignificant part in reproduction, the burden of ill-health resulting from the perversion of Nature's laws falling entirely on the woman.

Reproduction—e. g., generation of new individuals—is a most wonderful and mysterious phenomenon. Although science has arrived at a fair degree of accuracy as to the physiological changes taking place in the process, yet how these changes take place, and a proper appreciation of their wondrous mysteries, is not at present generally understood. Those of us who have had the privilege of studying biology, botany and zoology, also human anatomy and embryology, have had our souls stirred to the very foundations at the wonders of life. and

wise men will ever continue to wonder at the provisions of Nature for the propagation of her species. Microscopy has enabled us to note the marvelous evolution of a single cell after becoming fertilized by the male element, or "spermatozoon," and to mark the changes which take place during each succeeding month within the mother's womb. The growth of the child and youth is of the same nature as the growth of the earliest embryo.

Various anomalies exist among the vertebrate animals, in some instances the two sexes being represented in one individual, though the absolute union of the two sexes in one individual, or a true hermaphrodite, is not possible. However, all animal life in its earlier stages shows the characteristics of both sexes, the sex not being determined until the third month of gestation.

The subject of life and reproduction is an extremely broad one, and the author can only hope to impress upon the mind of his reader the most salient points in this interesting phenomenon, in order to better demonstrate the harmful effects of abortion.

For reproduction it is necessary that there be a blending of the male and female elements of opposite sexes. The male element is called the spermatozoon; the female element, the ovum or egg, it being the function of the former to fertilize or impregnate the latter. When this takes place, the fusion of the two elements forms the embryo. The semen is a secretion of the testicles, the prostate and Cowper's glands, also some of the accessory generative

glands. It is a thick, albuminous fluid, and is ejaculated from the male generative organs during copulation. It serves as a vehicle or carrier for the male fertilizing element, the spermatozoa. In a single drop of semen there are many thousands of these little spermcells, only one of which is concerned in the impregnation of the female egg. In plant life, the male element is the pollen, which is carried by the breeze to the female cells. These are called "wind-bearing" plants, and the combination of the elements of the two sexes is just as necessary in plant as in animal life. These pollen-grains are carried about in clouds, thus showing how lavish Nature is in her provision for the propagation of her species.

Each spermatozoon has been likened to a tadpole in appearance. It consists of a head, a body and a tail. The latter executes peculiar vibratile or lashing movements which drive the head forward in opposition to the flow of the female secretions, and to the force of gravity. It is propelled in much the same manner as a fish is propelled through the water by the movements of its tail and fins. It has been estimated that by virtue of this inherent motility, a spermatozoon deposited in the vagina of the female will reach the uterus in three hours. Their vitality is, perhaps, the most wonderful thing in Nature. These little cells have been found alive in men eighty hours after execution. All other tissues in the body perish immediately, but the spermatozoa seem to have an independent life, and remain active long after the rest of the tissues in the body are dead.

When deposited in their natural soil, the female generative organs, they retain life and activity upwards of eight days. Everything in Nature favors reproduction, and she has elaborated no other fluid which can compare with the semen in vitality and importance. The spermatozoa are a product of the testicles, being formed there by specialized cells, after which they are deposited in the semen, which carries them along in the same manner as blood-cells are carried by the liquid portion of the blood.

The testicles are two oval bodies suspended in the scrotum by the spermatic cords. They are composed of many very fine tubules called "semeniferous tubules," which contain the semen. These all empty into one larger tubule called the "epididymus," which, when straightened out, measures twenty feet in length. This tubule is folded upon itself many times and is attached to the upper end of the testicle and again empties into a larger tubule, which is no longer convoluted, called the "vas deferens," which conveys the semen to two storehouses on the base of the bladder, the "vasiculæ seminales," there to remain until they are stimulated sufficiently to cause them to eject their contents into the ejaculatory ducts, which convey it to the urethra. In the seminal vesicles the semen is diluted by a fluid of thinner consistency which is secreted there, thus adding motility to the spermatozoa. An erroneous idea obtains among many that a woman is barren for several days midway between the menstrual periods, but as a matter of fact, there is

no time during the thirty years of her sexual life when she cannot become pregnant.

The essential factor in the distinction of sex is the generation of spermatozoa by the male, and ova by the female, and reproduction can occur only when these two elements become blended. The act of copulation is the normal way, but it is by no means essential, as artificial impregnation has often been accomplished. Women hitherto sterile have become pregnant by the injection of semen into the genitalia.

In most fishes impregnation occurs externally to the body of the female. The "spawn" are deposited in the water by the female, the "milt" by the male, leaving the fusion of these two elements to chance. In fish culture, the milt and spawn are stripped from the bodies of the male and female fish and mixed together in a jar of water, when later great quantities of fish are hatched.

Each menstrual period of a woman is a miniature labor, during which there is usually only one ripened egg, or ovum, thrown off from the ovary. This passes into the Fallopian tube, and there meets the spermatozoon of the male, the head of which is forced through the outer membrane of the ovum by the lashing movements of its tail, thus resulting in the impregnation of the ovum, or the beginning of a new existence. It is claimed by some authors that this fusion or impregnation may take place in the uterus, but it is the generally accepted belief that it takes place in the Fallopian tubes. After impregnation, the ovum passes down to the uterus, there to remain until the gestation

period of nine months has expired. It sometimes becomes embedded in the mucous membrane of the tubes so securely that dislodgment does not occur. The embryo still continues to grow, however, and the condition is called "extra-uterine pregnancy," an operation to remove the embryo being necessary.

The female supplies but one ovum at each menstrual period, except where twins, triplets, or, in some cases, quadruplets, are born. These ova develop in the ovary of the female, and as they ripen they approach the surface of the ovary, are thrown off, and pass down to the uterus through the Fallopian tubes.

The female sexual organs consist of the organs of generation, comprising the uterus, Fallopian tubes, ovaries and vagina; the breasts and mammary glands are classed by some authors as belonging to the generative organs, but they are more properly the organs of lactation.

The vagina is a muscular tube or passage connecting the uterus with the outside of the body, and is about four inches long. Its functions are the reception of the male organ in the act of copulation and to serve as a passage for the expulsion of the foetus at maturity.

The uterus, or womb, is a pear-shaped, hollow, muscular organ, communicating below with the vagina by means of the cervical canal, or neck of the womb. Opening into its upper portion, or fundus, are the Fallopian tubes, one on either side. The uterus is lined with a thick mucous membrane, which is shed every

twenty-eight days, and passes out at the vagina. This constitutes the menstrual flow. The cavity of the uterus is the resting place for the growth and development of the impregnated egg or ovum, which it retains, under normal conditions, for ten lunar months, at which time it completes its period of intra-uterine development.

The Fallopian tubes, or oviducts, are two muscular canals extending outward from the upper part of the uterus toward the ovaries. At their outer extremities they are provided with little finger-like processes, or fimbriæ, which grasp the ovaries at the point from which the ripe ovum is about to escape, and convey it to the uterus. This is accomplished by means of the ciliated epithelial cells lining the tubes, which execute a wave-like motion, thus creating a current of air in the direction of the uterus. These tubes are larger at the fimbriated end than where they are attached to the uterus, and at the latter points are so small as to barely admit a bristle.

The ovaries are situated one on either side of the pelvic cavity at the extremity of the Fallopian tubes. They correspond to the testicles in the male, as they produce the ovum, or female element, while the testicle produces the spermatozoon, or male element. Each ovary contains over seventy thousand Graafian follicles, or cup-like cavities, in each of which there is an ovum, or egg, which, however, do not begin to ripen until puberty. Only a small number of these ova arrive at maturity. As the ovum develops, it approaches the surface

of the ovary, ruptures, and is discharged into the Fallopian tube, and, if unimpregnated by a spermatozoon, passes off with the menstrual flow.

Menstruation occurs periodically every twenty-eight days normally, though the exact time varies in different individuals. The name is taken from the Latin word "mensis," meaning a month. During this phenomenon there is a shedding of the outer layers of mucous membrane lining the uterus, and an ovum is discharged into the uterus. It occurs at stated intervals or cycles during the thirty years of the sexual life of a woman, beginning usually at about fourteen years, and terminating at the "menopause," at about the forty-fourth or forty-fifth year. Menstruation can, in health, only be interrupted by pregnancy or lactation.

Conception is the endowment with life of the male and female reproductive elements and the formation of the embryo. The beginning of all development is the impregnated ovum, resulting from the fusion of the spermatozoon of the male and the ovum of the female. It is the beginning of a new existence, and springs from a single cell which has all the characteristics of an egg. The ovum is microscopic in size, being $1\text{-}120$ of an inch. One of the largest cells known is the ostrich egg, which corresponds to the human ovum, and yet constitutes a single cell. Birds are known as oviparous animals because their eggs are hatched outside the body. In viviparous animals there is a connection established within the mother by means of the placenta and umbilical cord. The main dif-

ference between an egg and the human ovum is the "egg-shell," which is derived from calcareous matter during the passage of the ovum down the Fallopian tube of the bird. Corresponding to this in the human egg, we have the "zona pellucida," which is the outer membrane of the ovum. Nearly all cells are microscopical in size, the eggs of birds being exceptions. The body of man contains countless millions of cells, whose functions vary in the different parts of the body, yet he originated from one single cell or ovum! Thus these cells which compose the human body are modified to perform the different functions of motion, sensation, etc. We have bone-cells, blood-cells, nerve-cells, fat-cells, cartilage-cells, and in addition we have the cells that are concerned in reproduction, i. e., the spermatozoa and ova. As regards its structure, the ovum is similar to other cells, but physiologically it is vastly different, as this is the only cell which is capable of being developed into an organism if impregnated. From this single cell, all the cells and tissues of the body are developed. Out of the many thousands of spermatozoa that may have found their way up the Fallopian tube, only one is, as a rule, able to penetrate the ovum. They seem almost to display intelligence in their united efforts to reach the ovum, and whoever wins is victor. The vital part of the sperm-cell is its head and body, and when this penetrates the cell, the tail has performed its function, and is cast off. It is, in short, the power or motor force which propels the head and body forward. The head is now buried in the yolk of

the egg, having penetrated the zona pellucida, and undergoes various complicated changes which result in the formation and development of a human being. This is the starting point in the history of every individual. What wonderful intelligence Nature seems to display, and how miraculous are her manifestations! Yet this process is repeated so often, and is so thoroughly in accord with the laws of Nature, that it cannot be called a miracle. Comparatively few who are taking an active part in the propagation of the human race are familiar with its great underlying principles, and the laws of Nature which control the origin and development of the species. It is not only necessary to know these laws, but also to understand the disastrous consequences of their violation. It is an intensely interesting study, aside from its being of vital importance to every mother.

We have found that the earliest beginning of life, then, springs from the impregnated ovum or germ-cell. This germ develops into the next stage, called the embryonic stage, and retains this name for three months, at which time the placental circulation is established, after which time, and until birth, it is called a foetus. After delivery it is called a babe, and this name continues as long as it is dependent upon its mother for nourishment, after which it receives various names, i. e., child, pubescent, adolescent and adult, until with the advances of senile decay it becomes a neuter.

It is not the purpose of this work to give in detail the many complicated changes which the

germ-cell undergoes in its division and subdivision to form the countless millions of little cells which compose the human body, but to outline briefly the different changes which take place in the process of development within the mother.

Impregnation usually takes place in the tubes, and as soon as it is accomplished, the uterus undergoes preparatory changes for the reception of the embryo. The mucous membrane is thrown into numerous folds, additional blood is sent here, causing a swelling of the membrane, and at the end of seven or eight days the preparations are completed and it is ready for the reception of the impregnated ovum, which passes down the Fallopian tube and becomes lodged in one of the folds of the mucous membrane, there to remain until a human being is formed. The embryo is now resting in a cup-like cavity formed by the folds of the mucous membrane, and these folds continue to grow and separate into three layers, until they completely envelop the ovum. There is a special modification of this membrane at a point nearest the ovum which develops into the placenta, through which the blood of the mother passes into the embryo for its growth and nourishment. From the formation of the placenta, it is thenceforth termed a "fœtus."

The placenta is the organ of nutrition, respiration and excretion of the fœtus. It is composed mainly of arteries and veins which carry pure blood to the fœtus and eliminate waste matter. It becomes attached to the wall of the uterus, sends out a process called the umbili-

cal cord, and this cord becomes attached to the navel of the foetus. The cord is composed of two arteries and one vein, and is completely developed at the end of the third month.

The earliest indication of the embryonal form is the neural or spinal canal, in which is formed a rod of nerve tissue, the anterior extremity of which enlarges to form the brain. This is the beginning of the nervous system, which is among the first structures to be formed, and occurs about the thirteenth or fourteenth day. At the end of the second week the heart appears in the form of an empty sac. At this time the embryo is one one-eighteenth of an inch long, and at the beginning of the third week, the heart is beating, and its four chambers are formed at the end of the fourth week. From this time on the growth of the embryo is more active. It now changes its attitude, and instead of being erect, becomes strongly flexed, so that the two extremities meet or actually overlap. At this time it is about the size of a pigeon's egg. The primitive intestine is well formed, the nerve centers and vertebræ are very distinct, and the heart has greatly increased in size and power.

During the second month, the eyes, ears, nose and mouth are formed, and the fingers and toes can be seen. The external sexual organs are also formed at this time, although it is impossible to determine the sex, as in the early stages the two sexes are developed alike. At this time the embryo is from one to one and a half inches in length. At three months, the eyes, ears and fingers are well

formed and the sexual organs are sufficiently distinct so that the sex can be determined. At the fourth month the foetus is covered with a soft downy growth of hair, and the eyes, nostrils and lips are closed, but it can move its limbs freely. At about five months the foetal heart can be distinguished beating against the abdominal wall of the mother, at which time she can usually feel the active movements of the foetus "quickening." These constitute the actual signs of pregnancy. If delivered at the end of five months it only survives a few hours. At six months they possibly survive if kept in an incubator. At seven months, the child is capable of surviving, though not as liable to do so as it is if delivered at "term." The idea that obtains among many people that a seven months child is more liable to survive than an eight months child, is erroneous, and contrary to all the laws of Nature. At the end of eight months the foetus is about fifteen inches long, and averages about five pounds; at nine months it averages nineteen to twenty-two inches long and seven pounds in weight. At the end of pregnancy, i. e., ten lunar months, its body is plump, the nails are hard, the hair on the head about half an inch long, and it usually cries lustily at birth, which is the first appearance of air within the lungs. About twenty minutes after the delivery of the child, the membranes, which have burst to free the foetus, pass away with the placenta and umbilical cord, all of which combined, constitute the "after-birth."

The changes which take place, when it is

dependent upon the mother for life, can, of course, only be observed in woman in case of an occasional accident, but our information has been obtained from the study of comparative embryology in different animals. The time of coitus is noted, and then animals are killed at the different stages to establish the certainty as to the exact time these various changes take place. No human ovum has ever been seen during the first week of development, the earliest one of which there is a record, being one taken from the womb of a woman who committed suicide, presumably thirteen days after impregnation. The changes which take place after birth, are no less remarkable than the intra-uterine changes, for at birth the child is not by any means developed. It has merely arrived at that stage in development when it can continue its growth independently of the mother. Complete development occurs at about the twenty-fifth year, and not until then are the bony structures of the body fully formed.

It is a most beautiful thing to study the different changes of life from the microscopic changes of conception to the more apparent ones of maturity and old age. The mass of people look upon the early illustrations of the embryo as repulsive and ugly. But it is just as truly beautiful to the physiologist as the maturer development, and takes just as high a place in the evolution of human life. The higher education deals with all the laws of Nature alike. It does not select certain portions as forbidden or uncouth subjects, the discussion of which is immodest. It does not

withhold from children a knowledge of the human body and the formation of plant and animal life, which, in a primitive way, they should be taught. These laws should be gradually unfolded to them as their own little bodies grow and as their minds are capable of grasping them. With an education along these lines, the child would enter the age of puberty with an intelligent understanding of the rudiments of Nature's laws, and the result of their violation. Its education would have been begun aright, and the injurious habits often formed at this time would be prevented.

Having formed a fair idea of the evolutionary changes in physical life, we can now proceed more intelligently to discuss the harmful effects of abortion, or the interruption of the course of Nature.

There are various interpretations of the word "abortion," but its meaning from the medical standpoint is the expulsion of a foetus before it is endowed with life, or "viable," which would necessarily be during the first three months of gestation. "Miscarriage" is the term employed after the third month to the end of the sixth or seventh, and "premature labor" may occur at any time after the child is viable to the end of the full-time pregnancy. A child may or may not be capable of sustaining independent life at the expiration of the seventh month, but as a rule it is viable at any period after the seventh month.

The risks and dangers attendant upon abortion are very great indeed, especially after the

first month, the danger increasing as pregnancy progresses. As has been shown above, the uterus undergoes a slow and gradual change for the reception of the foetus and for its delivery at the end of nine months, and when forced to do this work prematurely it is unprepared, and the uterus is unable to contract sufficiently to completely expel the contents. This causes a wide range of disorders, such as subinvolution, displacements of the uterus, leucorrhea, hemorrhages, etc. In fact, a woman very rarely escapes serious consequences. After one abortion has taken place, subsequent ones are more liable to occur, and the diseased condition of the reproductive organs often renders the woman barren for life. According to Dr. Aurbach of Germany, one of the chief causes of abortion is syphilis. He regards it as the real cause of race suicide. It threatens the life of the nation. It is a greater danger than tuberculosis. Of the 250 physicians who visited America with him, all received the same distinct impression, that syphilis constituted a great menace to our country. The prevention of syphilis was the most important question of the United States today. There are a train of diseases directly due to this taint. There were evidences of them on every hand. Locomotor ataxia, general paresis and other diseases. The remedy was a campaign of education carried on by the lay press. They should print the names of the diseases, so that all may understand their nature and danger. "This is not only my individual opinion, but that of the physicians who came with me." Abortion can be lessened,

healthy children born, race suicide eliminated. Not every man or woman is fitted to be a father or mother. It is a sacred obligation and should ever be held as such. The consideration of the future welfare and happiness of their children should be a matter of greatest importance to every parent. The home life should be so regulated as to make it a fit place for their growth and education, and not until there is a proper conception of the duties of parentage will there be an improvement in the situation. The mother is the type of the highest expression of Nature, and her creation crowned the animal kingdom. The millions of humanity who have been sent on this earth to work out our civilization all sprang from one original cell measuring one one hundred and twentieth of an inch in size! The name of "mother" is sacred the world over, and the tie that binds her to her child is usually more intimate and lasting than the affection she feels for the father. The mating of the two sexes is consummated in the sexual act, and the result is the child that binds them together. We owe it as a sacred duty to posterity and to ourselves that greater care should be taken in the propagation of the race; that our children be reared and nurtured in hygienic surroundings, and that the environment of the home life shall be such as to wield a powerful influence for good upon each and every member of the household. The highest function of true manhood is to protect the woman he loves and uphold her during the years in which she is devoting her mind and heart to the rearing of their chil-

dren. He plays the aggressive part, and his very approach to the woman is a pledge of his guardianship and protection to her.

Abortion as it is commonly practiced is a crime against the infant, the mother, the family circle and society, and unless therapeutically employed, is indefensible.

[In Little Blue Book No. 726, Dr. Joseph H. Greer continues his discussion of sex, devoting special attention to venereal diseases. The book is called "Simple Facts About Venereal Diseases."]



